

Abstract of the Disclosure

A process for hermetically packaging a microscopic structure including a MEMS device is provided. The process for the present invention includes the steps of depositing a capping layer of sacrificial material patterned by lithography over the microscopic structure supported on
5 a substrate, depositing a support layer of a dielectric material patterned by lithography over the capping layer, providing a plurality of vias through the support layer by lithography, removing the capping layer via wet etching to leave the support layer intact in the form of a shell having a cavity occupied by the microscopic structure, depositing a metal layer over the capping layer that
10 is thick enough to provide a barrier against gas permeation, but thin enough to leave the vias open, and selectively applying under high vacuum a laser beam to the metal proximate each via for a sufficient period of time to melt the metal for sealing the via.